Communications Restoration and Recovery (CRR)

CRR Technical Specifications

General Vehicle Specifications

2009 Ford F-450, or equivalent Make / Model

- Crew-Cab
- LWB
- Eight-foot bed
- Engine block heater
- Traction Control
- Transmission PTO
- Up fitter switches
- Dual Alternator
- Trailer Tow Package
- Tow command System
- Brake Controller
- Power Tow Mirrors
- Diesel Engine - 6.4L 4-Valve Engine V8 Turbo Diesel
- Air Conditioning
- Automatic Transmission
- Power Brakes
- Power Steering
- Cruise Control
- Reverse Vehicle Aid Sensor
- Four-corner emergency strobe lights
  - Emergency strobe lighting, within factory lenses, four corner, 360 degrees coverage
- 4 Wheel Drive
- Dual Rear Wheels
- 38 Gallon Fuel Tank or greater
- Color white
- Gray Interior
- Exhaust Diverter, Minimum 20'

Required Vehicle Additions

- 15kw RealPower PTO-driven generator system mounted to frame rail with exterior mounted control panel
- JOTTO DESK Computer Mount installed in vehicle cab
- Motorola XTL-5000 UHF and VHF Mounted Radio System
- Hitch Step - Hitch-mounted step for shelter access

External Shelter Specifications

- Single unit, watertight fiberglass shelter, such as the Mory Master 75 Shelter or equivalent
- External Roof Rack that can accommodate the mounting of:
  - antennas, cameras, speakers
  - satellite dish

- o retractable awning
- o telescoping ladder for roof access
- o 12 volt AC external flood lights
- Vehicle and Shelter Graphics and markings per purchaser requirements
- Passenger side window with door for covering during transport ~71" x 23"
- Heavy duty jacks and support stands for when the shelter is removed from vehicle
- Support hooks, or support pallet for providing shelter air-lift capabilities
- Roof/rack mounted 1.2 meter satellite dish
  - o Make and Model   AvL   1278K
- Roof/rack mounted RV style awning
- Four roof/rack mounted 12 VAC external flood lights
- Roof/rack mounted power controlled mast antenna
- Roof/rack mounted all weather, pan, tilt, zoom, high resolution color, infrared cut filter, auto focus camera
- Integrated audio with four waterproof roof/rack mounted speakers
  - o Two internal shelter speaker (See Audio Equipment below)
- External Patch Panel with interfaces for power, and voice/video/radio equipment

Internal Shelter Specifications

- Three 24" deep electronic equipment racks that slide out and rotate left and right, mountable to shock mounts   Mid-Atlantic SRSR-4-24
- Rack Shock mounts   Barry Controls shock absorbers UC-1035-T4
- Equipment rack shelve   Mid-Atlantic RC-3 3RU clamping shelf
- Equipment rack shelve   Mid-Atlantic RC-2 2RU clamping shelf
- Equipment Drawer w/ lock   Mid-Atlantic D2LK 2RU drawer w/lock
- Rack power conditioners   Furman SMP+ PL-Plus D Series II
- Patch Panel RF BNC   Qube Corp Patch Panel Box
- Hour Meter   Curtis 701TR0010512D
- Heater   Lakewood Heater Model 707
- Entry Door Grab Handle   Madison RV part # 31-8645
- Interior lighting
- Interior passenger side work desk   ~102" x 18"
- Interior passenger side storage compartments
- Interior driver side storage compartments
- Interior wiring to accommodate Ethernet network and AC power jacks to include internal circuit breaker control panel
- Roof Mounted Air Conditioner   Minimum of 13.5K BTU

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This listing is CRR equipment that is to be procured and installed by the vendor during manufacturing and integrated into an operational state:

Interior communications / data Equipment:

Interoperability Equipment   (Transportation)

Radio Cantilever Rack Mounts	Motorola	90421
ACU-2000 Card Cage	Raytheon	5061-300000
ACU-2000 Card Modules:		
4 wire Devices (radio)	Raytheon	DSP-2 IP
2 wire Devices (POTS)	Raytheon	PSTN-1 IP
SIP Channel	Raytheon	SCM-2
Control Processor	Raytheon	CPM-6
Keypad	Raytheon	HSP-2A IP
ACU-2000 Radio Cables	Raytheon	TBD
72 Amp RP-15 Power Supply	Duracomm	601289

UHF Radio Equipment   (Transportation)

Astro Digital CAI	Motorola	G806AT
Encryption UCM Hardware	Motorola	G159AC
AES Encryption	Motorola	G843AC
XTL1-5000 05 Control Head	Motorola	G442AB
Control Head Software	Motorola	G444
Smartnet Operation	Motorola	G50AL
KeyPad Microphone	Motorola	W20
Enhanced Digital ID Display	Motorola	G114AE
Remote Mount	Motorola	G67
5 Watt Speaker	Motorola	B18
Enhanced Digital ID Display	Motorola	G114
Remote Mount Cable	Motorola	G610

UHF Mobile Antennas   (Transportation)

Antenna Wideband 380-470MHz	Motorola	G431
Repeater Antenna Helical	Motorola	H125

UHF Portable Radios   (Transportation)

ASTRO CAI Operation Software	Motorola	Q806AA
Additional Batteries	Motorola	Q42AH
AES Encryption	Motorola	Q629AA
UCM Hardware Encryption	Motorola	Q159AA
Smartnet Systems Software	Motorola	H37BN
Enhanced Digital ID Display	Motorola	H14
Battery	Motorola	NNTN4435
Impress Single Unit Charger	Motorola	NTN1873
3.5 mm Jack Adapter	Motorola	BDN6676
Remote Speaker Mic	Motorola	NMN6191
6 Bay Reconditioning Charger	Motorola	WPPN4065R
KVL3000 Plus Key Loader	Motorola	T6717
ASN Mode	Motorola	X795AH

Tuesday, November 18, 2008

AES Encryption Software	Motorola	CA00182AA
Key Loading Cable for XTS Portable	Motorola	C724
Key Loader Dual Charger	Motorola	HKTN400B

HF Radio Equipment   **(Transportation)**

micom3T 125W HF-SSB Transceiver	Motorola	M91AMNOKV5-K
Control 7 Software	Motorola	G424
Interface Cable	Motorola	S809
Continuous Duty Data Package	Motorola	FLN2294
Antenna Tuner	SGC	SGC-230
HF Antenna and Mount	SGC	SGC-303

Amateur Band Radio Equipment   **(Transportation)**

VHF Amateur Radio	ICOM	IC-2820H
Separation Cable	ICOM	OPC-1663
Digital/GPS Unit	ICOM	UT-123
Dual Band Antenna	Tessco	29706
Antenna Mount	Tessco	32656

Mobile Radio Scanner   **(Transportation)**

Scanner	UNIDEN	BCD996T
Scanner Base Station Antenna	Procomm	SP800

Voice/Cellular Communication Equipment   **(Transportation)**

2-line Speaker Phone	GE	2-9484GE2
SX5E Cellular Base Station	Tellular	SX5T5G89F/1A1X
Power AMP Antenna	Tellular	DA4KFME
DA-4000 Jumper Cable	Tellular	CBL-MUHF-TNC-18
High-gain antenna	Tellular	CA04M

Video Equipment   **(Transportation)**

Dual 8" Rack Mount Monitor	Marshall	V-R82DP-2C
RGBHV switcher	Extron	SW6 RGBHV
Video Switcher with audio	Optima	16x16
Touch-screen controller	AMX	NI-3100
PSN Power Supply	AMX	PSN 6.5
Rack Mount Touch Panel	AMX	NXD-CV10
Rack Mount Kit	AMX	NXA-RK10
Biamp CS DSP	BIAMP	Nexia CS
External Rack-mounted Camera	Pelco	ES31CBW18-5N
Pedestal Camera Mount	Pelco	PM2010
Camera Power Supply	Pelco	TBD
Joystick Controller	Video Analytics	KCT-100
Data Merger/Matrix	Pelco	CM9760
Integrated VHS/DVD recorder	JVC	SR-MV50U
Internal camera	Canon	C50-i
DirecTV Receiver	Samsung	SIR S300W
DirecTV Antenna & Tripod	SatCom	MP2002PKG
Four-camera input video server	Axis	Model 241Q

Tuesday, November 18, 2008

Flip-down 12" LCD monitor	ACT	MCTM 12FD

Audio Equipment (Transportation)

Internal Speaker	Anchor	AN 130BK
Audio Power Amp	QSC	CX302
External Water Proof Speakers	JBL	Control 25AV-WH
Wireless headset microphone	Shure	SLX 14/30WH
Wireless handheld microphone	Shure	SLX 24/58SM

All Maintenance and Service manuals that are applicable.

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